

Office Action Summary	Application No. 10/606,333	Applicant(s) KOGA ET AL.	
	Examiner DENNIS G. BONSHOCK	Art Unit 2173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-17,19-26,28-38 and 40-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-17,19-26,28-38 and 40-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Non-Final Rejection

Response to Amendment

It is hereby acknowledged that the following papers have been received and placed on record in the file: Amendment as received on 3-4-2009.

Claims 1-42 have been examined.

Status of Claims:

Claims 1, 2, 6, 7, 11, 12, 14-16, 35-38, and 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gunn et al., Pub. No.: US 2005/0210402, hereinafter Gunn, Comerford et al., Patent Number: US 5,963,671, hereinafter Comerford, and Duarte, Patent Number: 7,093,201.

Claims 3, 4, 13, 17, 21-26, and 30-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gunn et al., Pub. No.: US 2005/0210402, hereinafter Gunn, Comerford, Do, Patent No.: US 6,417,869 and Duarte, Patent Number: 7,093,201.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gunn et al., Pub. No.: US 2005/0210402, hereinafter Gunn, Comerford et al., Patent Number: US 5,963,671, hereinafter Comerford, Duarte, Patent Number: 7,093,201, and Cirne, Patent No.: 5,625,763.

Claims 9, 10, 19, 20, 28, and 29 rejected under 35 U.S.C. 103(a) as being unpatentable over Gunn et al., Pub. No.: US 2005/0210402, hereinafter Gunn, Comerford, Do, Patent No.: US 6,417,869, Duarte, Patent Number: 7,093,201, and Cirne, Patent No.: 5,625,763.

Claims 5, 18, 27, and 39 have been cancelled by the Applicant.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 6, 7, 11, 12, 14-16, 35-38, and 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gunn et al., Pub. No.: US 2005/0210402, hereinafter Gunn, Comerford et al., Patent Number: US 5,963,671, hereinafter Comerford, and Duarte, Patent Number: 7,093,201.

3. With regard to claim 1, which teaches a display control device comprising: a display control section adapted to display a plurality of button groups each having at least one button in a monitor connected thereto and to display any of the buttons displayed in the monitor in focused state; Gunn teaches, in paragraphs 125 and 128, a system comprising a plurality of button groups where when a button group is displayed on the monitor, one of the buttons is displayed in a focused state. With regard to claim 1, which further teaches a button change section including an in-group button changing operation unit adapted to change the button to be focused from one button to another within the button group, Gunn teaches, in paragraph 10, changing the current focus within a button group. With regard to claim 1, which further teaches an inter-group button changing operation unit adapted to change the button to be focused from a button of one button group to a button of another button group, Gunn teaches, in

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paragraphs 125 and 128, changing button groups and further changing the focus to the most likely button in the changed to button group. With regard to claim 1, which further teaches wherein, when the button to be focused is changed by the inter-group button changing operation unit from the button of one button group to the button of another button group, the display control section displays a predetermined button of the button group changed in focused state, Gunn teaches, in paragraphs 125 and 128 and figures 10-12, the most commonly used character (as predefined by previous usage) will be displayed in or near the center of a character set grouping that is user selectable, this focus item could additionally be displayed in a different color, font, or boldness to signify its focus (see paragraph 160).

Gunn teaches changing character configurations that are presented to the user based upon the likelihood of a selection where location is modified to highlight particular characters (see paragraph 125), but doesn't specifically teach dynamically changing the button of focus within a displayed groupings. Comerford teaches modifying the appearance of characters so as to make it easier for a user to locate based upon their likelihood of selection (see column 3, lines 15-24), similar that of Gunn, but further teaches dynamically changing the highlighted element(s) to a different element(s) in the set as a word is being typed so that the most likely candidate(s) is always highlighted, and keeping an ordered likelihood of subsequent character selection (see column 3, lines 15-24 and 50-67 and column 5, lines 13-37). It would have been obvious to one of ordinary skill in the art, having the teachings of Gunn and Comerford before him at the time the invention was made to modify adaptable keyboard configuration of Gunn to

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change the orientation of characters within the groups, as did Comerford, leaving a system which dynamically updates the elements level of focus moving characters between the outer (less commonly used) ring, the inner (more frequently used) ring, and the central focus, all dynamically to reflect probability of character selection. One would have been motivated to make such a combination because this allows the characters of most likely selection to always be displayed predominantly on the display.

Gunn and Comerford teach a system for moving between groups of icons highlighting the elements deemed most relevant to the current situation (*supra*), but don't specifically teach a start menu comprising a plurality of icons corresponding to functions whereby selection of one of the icons causes the display of the additional groups of icons. Duarte teaches a system for displaying grouped icons in a radial based display (see column 2, lines 33-and figures 1 and 4), similar to that of Gunn and Comerford, but further teaches displaying an initial start menu that allows for a user to select a particular function and that subsequent grouped menu items will be based upon the selected function (see column 2, lines 33-55 and column 8, lines 24-38 and figures 1, 4, and 11). It would have been obvious to one of ordinary skill in the art, having the teachings of Gunn, Comerford, and Duarte before him at the time the invention was made to modify the menu display system of Gunn and Comerford to initiate display based upon a selection from a parent start menu. One would have been motivated to make such a combination because this causes the display of the particular menu of interest, as is done in most graphical user interface systems a user starts at a particular

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start screen offering the user a broad range of functions from which to peruse menu options from.

4. With regard to claim 2, which teaches wherein the display control section displays such a base ring in the monitor as is formed in an information display portion for displaying various information, and displays the buttons arranged around the base ring by dividing the buttons into the button groups, Gunn teaches, in paragraphs 126 and 127 and in figures 10-12, displaying a base ring for the selected group of buttons and a group of buttons surround it.

5. With regard to claim 6, which teaches wherein the display control section displays ten keys as one of the button groups, Gunn teaches, in paragraphs 127 and 128, the varying of the number of keys displayed and a numeric keypad which contains keys 0-9. With regard to claim 6, which teaches wherein when the button to be focused is changed by the inter-group button changing operation unit from a button of one button group to a button of the ten keys, the display control section displays the predetermined button in the ten keys in focused state, Gunn teaches, in paragraphs 125 and 128, a changing of the group of keys to be presented, where one of the keys is displayed in a focus state.

6. With regard to claim 7, which teaches wherein the display control section applies the predetermined button to a button indicating "0" in the ten keys, Gunn teaches, in paragraphs 125 and 128 and in figure 11, one of the plurality of keys in the key group has focus, where the example places "0" in the focus.

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7. With regard to claim 11, which teaches wherein the in-group button changing operation unit is operated in an array direction of the buttons in the button groups so that the button displayed in focused state is to be moved from one button to another button displayed in the array direction within an identical button group by the display control section, Gunn teaches, in column 126 and 126 and in figures 10-12, a button array where a second most likely group of candidates is displayed in a ring around the focus element, each element adjacent to a similarly likely candidate, so that if the focus must be changed the additional elements are specially close.

8. With regard to claim 12, which teaches, wherein the inter-group button changing operation unit is operated in an array direction of the button groups so that the button displayed in focused state is to be moved from one button in one button group to a button of another button group displayed in the array direction by the display control section, Gunn teaches, Gunn teaches, in column 126 and 126 and in figures 10-12, a button array where a second most likely group of candidates is displayed in a ring around the focus element, and a further group of candidates less likely displayed in a ring around the second most likely group of candidates, so that if the focus must be changed the additional elements are specially close.

9. With regard to claim 14, which teaches wherein the display control section displays the button selected by the button change section in focused state by displaying highlighted, Gunn teaches, in paragraph 160, displaying the button to be focused with a different level of boldness and color.

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10. With regard to claim 15, which teaches wherein the display control section displays the button selected by the button change section in focused state by displaying enlarged, Gunn teaches, in paragraph 160, displaying the button to be focused with a different font.

11. With regard to claim 16, which teaches wherein the display control section displays the button selected by the button change section in focused state by changing the display color of the focused button, Gunn teaches, in paragraph 160, displaying the button to be focused with a different color.

12 With regard to claim 35, which teaches the focused state of a button comprises a cursor positioned at the button, Gunn teaches, in paragraph 166, locating the cursor at the focus position (center button).

13. With regard to claim 36, which teaches wherein when the button to be focused is selected by the display control device, the display changes from a first display window to a second display window corresponding to the button to be focused, Gunn teaches, in paragraphs 128 and 129 and in figures 10-12, changing the displayed subset of characters, including a focus item when a change in focus changes to a different character set. Comerford further teaches, in column 3, lines 50-67, changing the way a set of characters is displayed based upon a change in focus.

14. With regard to claim 37, which teaches said second display window comprises a plurality of sub-buttons directed to the button selected by the display control device in said first display window, Gunn further teaches, in paragraphs 128 and 129 and in figures 10-12, after following a link to a different set of characters displaying in the new

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character set window sub-characters characterized under the selected character from the initial window.

15. With regard to claim 38, which teaches an input unit which inputs a button selection command by a user, wherein the in-group button changing operation unit changes the button to be focused in response to the button selection command input to the input unit, Gunn further teaches, in paragraph 17, the user supplying a character selection input via a pointing device. Gunn further teaches, in paragraphs 125 and 128, changing button groups, responsive to a user input of a particular hot key, and further changing the focus to the most likely button in the changed to button group. Comerford further teaches dynamically changing the highlighted element(s) to a different element(s) in the set as a word is being typed so that the most likely candidate(s) is always highlighted, and keeping an ordered likelihood of subsequent character selection (see column 3, lines 15-24 and 50-67 and column 5, lines 13-37) (*supra*).

With regard to claim 40, which teaches said plurality of button groups indicating possible operations corresponding to a selected icon, Duarte further teaches, in column 2, lines 33-55 and column 8, lines 24-38 and figures 1, 4, and 11, that the button groups revealed from selection of an item from the parent menu show operations related to the parent.

With regard to claim 41, which teaches said plurality of button groups arranged along an annular ring, Gunn teaches, in paragraphs 124 and 125 and figure 3, the button groups being arranged around a ring. Duarte further teaches, in column 2, lines

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33-55 and column 8, lines 24-38 and figures 1, 4, and 11, that the button groups revealed are arranged along a ring.

With regard to claim 42, which teaches an information display portion disposed within the annular ring said information display portion displaying an image which identifies a selected icon, Gunn teaches, in paragraphs 124 and 125 and figure 3, locating a particular element within the ring based upon prior selections. . Duarte further teaches, in column 2, lines 33-55 and column 8, lines 24-38 and figures 1, 4, and 11, displaying a previously selected icon (from the start menu) in the center of the annular ring.

16. Claims 3, 4, 13, 17, 21-26, and 30-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gunn et al., Pub. No.: US 2005/0210402, hereinafter Gunn,, Comerford, Do, Patent No.: US 6,417,869, and Duarte, Patent Number: 7,093,201.

17. With regard to claim 3, which teaches wherein the display control section comprises a processing unit adapted to execute software application programs, and wherein the display control section displays and divides the button groups for the functions of the software application programs to be executed by the processing unit, and applies the predetermined button to a button for executing a frequently used function in the button groups, Gunn teaches, in paragraphs 125 and 128, a system comprising a plurality of button groups, where when a button group is selected for display on the monitor, one of the buttons is displayed in a focused state based on which one is most commonly used, and in paragraph 52, a processing unit for executing

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software applications. Gunn, however, doesn't specifically teach a particular button group pertaining to a particular software application. Do teaches, a system for providing a plurality of different button groups on a display, similar to that of Gunn, but further teaches, in column 7, line 10, through column 8, line 30, providing different button groups based on a particular application program selected. It would have been obvious to one of ordinary skill in the art, having the teachings of Gunn and Do before him at the time the invention was made to modify grouped buttons of Gunn to be associated with particular applications, as did Do. One would have been motivated to make such a combination because different applications have different relevant keys.

18. With regard to claim 4, which teaches wherein the display control section comprises a processing unit adapted to execute software application programs, and wherein the display control section displays and divides the button groups for the functions of the software application programs to be executed by the processing unit, and applies the predetermined button to a button for executing a main function in the button groups, Gunn teaches, in paragraphs 125 and 128, a system comprising a plurality of button groups, where when a button group is selected for display on the monitor, one of the buttons is displayed in a focused state based on which one is most commonly used, and in paragraph 52, a processing unit for executing software applications. Gunn, however, doesn't specifically teach a particular button group pertaining to a particular software application. Do teaches, a system for providing a plurality of different button groups on a display, similar to that of Gunn, but further teaches, in column 7, line 10, through column 8, line 30, providing different button

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groups based on a particular application program selected. It would have been obvious to one of ordinary skill in the art, having the teachings of Gunn and Do before him at the time the invention was made to modify grouped buttons of Gunn to be associated with particular applications, as did Do. One would have been motivated to make such a combination because different applications have different relevant keys.

19. With regard to claim 13, Gunn teaches, in paragraphs 125 and 128, a system comprising a plurality of button groups, where when a button group is selected for display on the monitor, one of the buttons is displayed in a focused state, but doesn't specifically teach a remote controller separated from the display control section, wherein the button change section is disposed in the remote controller. Do teaches, a system for providing a plurality of different button groups on a display (see column 7, line 10, through column 8, line 30), similar to that of Gunn but further teaches, in column 7, lines 49-54, the system comprising a remote control which can enter numbers there by effecting the predicted set. It would have been obvious to one of ordinary skill in the art, having the teachings of Gunn and Do before him at the time the invention was made to modify predictive group element display of Gunn to include the remote control for optional entry as did Do. One would have been motivated to make such a combination because this provides the user with a means of affecting an input to the system without the need to be directly in front of the system.

20. With regard to claim 17, which teaches display control device comprising: a display control section adapted to display in a monitor connected thereto ten keys composed of a plurality of buttons for inputting a telephone number and a

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communication button for starting a telephone communication, and to display any of the ten keys and the communication button displayed in the monitor in focused state; Gunn teaches, in paragraphs 125 and 128, a system comprising a plurality of button groups where when a button group is displayed on the monitor, one of the buttons is displayed in a focused state. Gunn teaches, in paragraphs 127 and 128, the varying of the number of keys displayed and a numeric keypad, which contains keys 0-9. With regard to claim 17, which further teaches a button change section adapted to change the button to be focused from one button to another, wherein the display control section displays a predetermined button of the ten keys in focused state when the ten keys previously not displayed are displayed in the monitor, Gunn teaches, in paragraphs 125 and 128, changing button groups and further changing the focus to the most likely button in the changed to button group.

Gunn teaches changing character configurations that are presented to the user based upon the likelihood of a selection where location is modified to highlight particular characters (see paragraph 125), but doesn't specifically teach dynamically changing the button of focus within a displayed groupings. Comerford teaches modifying the appearance of characters so as to make it easier for a user to locate based upon their likelihood of selection (see column 3, lines 15-24), similar that of Gunn, but further teaches dynamically changing the highlighted element(s) to a different element(s) in the set as a word is being typed so that the most likely candidate(s) is always highlighted, and keeping an ordered likelihood of subsequent character selection (see column 3, lines 15-24 and 50-67 and column 5, lines 13-37). It would have been obvious to one of

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ordinary skill in the art, having the teachings of Gunn and Comerford before him at the time the invention was made to modify adaptable keyboard configuration of Gunn to change the orientation of characters within the groups, as did Comerford, leaving a system which dynamically updates the elements level of focus moving characters between the outer (less commonly used) ring, the inner (more frequently used) ring, and the central focus, all dynamically to reflect probability of character selection. One would have been motivated to make such a combination because this allows the characters of most likely selection to always be displayed predominantly on the display.

Gunn and Comerford teach, in paragraphs 125 and 128 and figures 10-12 of Gunn, the most commonly used character (as predefined by previous usage) will be displayed in or near the center of a character set grouping that is user selectable, this focus item could additionally be displayed in a different color, font, or boldness to signify its focus (see paragraph 160), but doesn't specifically teach the use of the system for a telephone communication. Do teaches, a system for providing a plurality of different button groups on a display (see column 7, line 10, through column 8, line 30), similar to that of Gunn and Comerford but further teaches, in paragraph 7, lines 36-60, utilizing a numeric pad similar to that in Gunn to implement a telephone communication. Do teaches the system accepting a numeric keys for a telephone call known in the art to comprise ten keys [(XXX) XXX-XXXX] and further remembering the last entered 10 keys for a redial function. Do further teaches, in column 7, lines 49-54, the system further comprising a dial button for initiating a call and obviously creating a new last dialed number for later redial. It would have been obvious to one of ordinary skill in the

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art, having the teachings of Gunn, Comerford, and Do before him at the time the invention was made to modify grouped buttons of Gunn and Comerford to be associated with particular applications such as a telephone application, as did Do. One would have been motivated to make such a combination because different applications have different relevant keys, in this case the numeric pad, as taught by both reference is utilized in Do to conduct a phone conversation, with past dialed numbers being preserved for further use.

Gunn, Comerford, and Do teach a system for moving between groups of icons highlighting the elements deemed most relevant to the current situation (*supra*), but don't specifically teach a start menu comprising a plurality of icons corresponding to functions whereby selection of one of the icons causes the display of the additional groups of icons. Duarte teaches a system for displaying grouped icons in a radial based display (see column 2, lines 33-and figures 1 and 4), similar to that of Gunn, Comerford, and Do, but further teaches displaying an initial start menu that allows for a user to select a particular function and that subsequent grouped menu items will be based upon the selected function (see column 2, lines 33-55 and column 8, lines 24-38 and figures 1, 4, and 11). It would have been obvious to one of ordinary skill in the art, having the teachings of Gunn, Comerford, Do, and Duarte before him at the time the invention was made to modify the menu display system of Gunn, Comerford, and Do to initiate display based upon a selection from a parent start menu. One would have been motivated to make such a combination because this causes the display of the particular menu of interest, as is done in most graphical user interface systems a user starts at a

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particular start screen offering the user a broad range of functions from which to peruse menu options from.

21. With regard to claims 21 and 30, which teach wherein the display control section applies a button indicating "0" of the ten keys to the predetermined button, Gunn teaches, in paragraphs 125 and 128 and in figure 11, one of the plurality of keys in the key group has focus, where the example places "0" in the focus.

22. With regard to claims 22 and 31, which teach wherein the display control section applies a button of the ten keys indicating the numeral of the telephone number to be normally dialed firstly, Gunn teaches, in paragraphs 66, 125, and 128, providing focus for the number most likely to be entered based on past frequency of use.

23. With regard to claims 23 and 32, which teach wherein the display control section displays the button selected by the button change section in focused state by displaying highlighted, Gunn teaches, in paragraph 160, displaying the button to be focused with a different level of boldness and color.

24. With regard to claims 24 and 33, which teach wherein the display control section displays the button selected by the button change section in focused state by displaying enlarged, Gunn teaches, in paragraph 160, displaying the button to be focused with a different font.

25. With regard to claims 25 and 34, which teach wherein the display control section displays the button selected by the button change section in focused state by changing

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the display color of the focused button, Gunn teaches, in paragraph 160, displaying the button to be focused with a different color.

26. With regard to claim 26, which teaches a display control device comprising: a display control section adapted to display in a monitor is connected thereto a plurality of buttons for inputting a telephone number and a communication button for starting a communication, and to display any of the ten keys and the communication button displayed in the monitor in focused state; Gunn teaches, in paragraphs 125 and 128, a system comprising a plurality of button groups where when a button group is displayed on the monitor, one of the buttons is displayed in a focused state. Gunn teaches, in paragraphs 127 and 128, the varying of the number of keys displayed and a numeric keypad, which contains keys 0-9. With regard to claim 26, which teaches a button change section adapted to change the button to be displayed in focused state from one button to another, wherein when the communication button is displayed in focused state and when the button to be displayed in focused state is changed by the button change section from the communication button to the button of the ten keys, the display control section displays a predetermined button of the ten keys in focused state, Gunn teaches, in paragraphs 125 and 128, changing button groups and further changing the focus to the most likely button in the changed to button group.

Gunn teaches changing character configurations that are presented to the user based upon the likelihood of a selection where location is modified to highlight particular characters (see paragraph 125), but doesn't specifically teach dynamically changing the button of focus within a displayed groupings. Comerford teaches modifying the

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appearance of characters so as to make it easier for a user to locate based upon their likelihood of selection (see column 3, lines 15-24), similar that of Gunn, but further teaches dynamically changing the highlighted element(s) to a different element(s) in the set as a word is being typed so that the most likely candidate(s) is always highlighted, and keeping an ordered likelihood of subsequent character selection (see column 3, lines 15-24 and 50-67 and column 5, lines 13-37). It would have been obvious to one of ordinary skill in the art, having the teachings of Gunn and Comerford before him at the time the invention was made to modify adaptable keyboard configuration of Gunn to change the orientation of characters within the groups, as did Comerford, leaving a system which dynamically updates the elements level of focus moving characters between the outer (less commonly used) ring, the inner (more frequently used) ring, and the central focus, all dynamically to reflect probability of character selection. One would have been motivated to make such a combination because this allows the characters of most likely selection to always be displayed predominantly on the display.

Gunn and Comerford teach, in paragraphs 125 and 128 and figures 10-12 of Gunn, the most commonly used character (as predefined by previous usage) will be displayed in or near the center of a character set grouping that is user selectable, this focus item could additionally be displayed in a different color, font, or boldness to signify its focus (see paragraph 160), but doesn't specifically teach the use of the system for a telephone communication. Do teaches, a system for providing a plurality of different button groups on a display (see column 7, line 10, through column 8, line 30), similar to that of Gunn and Comerford but further teaches, in paragraph 7, lines 36-60, utilizing a

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numeric pad similar to that in Gunn to implement a telephone communication. Do teaches the system accepting a numeric keys for a telephone call known in the art to comprise ten keys [(XXX) XXX-XXXX] and further remembering the last entered 10 keys for a redial function. Do further teaches, in column 7, lines 49-54, the system further comprising a dial button for initiating a call and obviously creating a new last dialed number for later redial. It would have been obvious to one of ordinary skill in the art, having the teachings of Gunn, Comerford, and Do before him at the time the invention was made to modify grouped buttons of Gunn and Comerford to be associated with particular applications such as a telephone application, as did Do. One would have been motivated to make such a combination because different applications have different relevant keys, in this case the numeric pad, as taught by both reference is utilized in Do to conduct a phone conversation, with past dialed numbers being preserved for further use.

Gunn, Comerford, and Do teach a system for moving between groups of icons highlighting the elements deemed most relevant to the current situation (*supra*), but don't specifically teach a start menu comprising a plurality of icons corresponding to functions whereby selection of on of the icons causes the display of the additional groups of icons. Duarte teaches a system for displaying grouped icons in a radial based display (see column 2, lines 33-and figures 1 and 4), similar to that of Gunn, Comerford, and Do, but further teaches displaying an initial start menu that allows for a user to select a particular function and that subsequent grouped menu items will be based upon the selected function (see column 2, lines 33-55 and column 8, lines 24-38

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and figures 1, 4, and 11). It would have been obvious to one of ordinary skill in the art, having the teachings of Gunn, Comerford, Do, and Duarte before him at the time the invention was made to modify the menu display system of Gunn, Comerford, and Do to initiate display based upon a selection from a parent start menu. One would have been motivated to make such a combination because this causes the display of the particular menu of interest, as is done in most graphical user interface systems a user starts at a particular start screen offering the user a broad range of functions from which to peruse menu options from.

27. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gunn et al., Pub. No.: US 2005/0210402, hereinafter Gunn, Comerford, Duarte, and Cime, Patent No.: 5,625,763.

29. With regard to claim 8, which teaches wherein the display control section comprises a button memory unit adapted to memorize a button that was focused immediately before the button to be focused is changed by the inter-group button changing operation unit from a button of the ten keys to a button of another button group, and wherein when the button to be focused is changed by the inter-group button changing operation unit from a button of the another button group to a button of the ten keys, the display control section displays the button memorized in the button memory unit in focused state, Gunn and Comerford teach, in paragraphs 125 and 128, a system comprising a plurality of button groups, where when a button group is selected for display on the monitor and a button group change can take effect where an entire

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button set is switched out for another one, and whenever a button set is displayed one of the buttons is displayed in a focused state, but don't specifically teach the memorizing of a button of focus before a group change and further remembering the focus button when the original button group regains focus. Cirne teaches a system where user interface items are grouped and presented to a user as a group, where one of the items of the group is given particular focus (see column 4, lines 65 through column 5, line 20), similar to that of Gunn, Comerford, and Duarte, but further teaches saving a current focus item in a group window, so that when the dialog returns to the window the focus can be directed to the same item. It would have been obvious to one of ordinary skill in the art, having the teachings of Gunn, Comerford, Duarte, and Cirne before him at the time the invention was made to modify grouped icon display with specific focus Gunn, Comerford, and Duarte to include the memorization of a groups focus as did Cirne. One would have been motivated to make such a combination because this allows for directing a focus to the same item when a group window is reopened.

30. Claims 9, 10, 19, 20, 28, and 29 rejected under 35 U.S.C. 103(a) as being unpatentable over Gunn et al., Pub. No.: US 2005/0210402, hereinafter Gunn, Comerford, Do, Patent No.: US 6,417,869, Durante, and Cirne, Patent No.: 5,625,763.

31. With regard to claims 9, 19, and 28, Gunn teaches, in paragraph 120, a button change section used for establishing focus. Gunn further teaches, in paragraphs 125 and 128 and in figure 11, one of the plurality of keys in the key group has focus, where

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the example places "0" in the focus. Gunn teaches, in paragraphs 125 and 128, a system comprising a plurality of button groups, where when a button group is selected for display on the monitor, one of the buttons is displayed in a focused state, but doesn't specifically teach the use of the system for a telephone communication.

Do teaches, a system for providing a plurality of different button groups on a display (see column 7, line 10, through column 8, line 30), similar to that of Gunn but further teaches, in paragraph 7, lines 36-60, utilizing a numeric pad similar to that in Gunn to implement a telephone communication. Do teaches the system accepting a numeric keys for a telephone call known in the art to comprise ten keys [(XXX) XXX-XXXX] and further remembering the last entered 10 keys for a redial function. Do further teaches, in column 7, lines 49-54, the system further comprising a dial button for initiating a call and obviously creating a new last dialed number for later redial. It would have been obvious to one of ordinary skill in the art, having the teachings of Gunn, Comerford, Do, and Duarte before him at the time the invention was made to modify grouped buttons of Gunn to be associated with particular applications such as a telephone application, as did Do. One would have been motivated to make such a combination because different applications have different relevant keys, in this case the numeric pad, as taught by both reference is utilized in Do to conduct a phone conversation, with past dialed numbers being preserved for further use. However, neither Gunn, Comerford, Do, nor Duarte teach memorizing the button displayed in focus for later use.

Cirne teaches a system where user interface items are grouped and presented to a user as a group, where one of the items of the group is given particular focus (see column 4, lines 65 through column 5, line 20), similar to that of Gunn, Comerford, Do, and Duarte, but further teaches saving a current focus item in a group window, so that when the dialog returns to the window the focus can be directed to the same item (see column 13, lines 1-10). It would have been obvious to one of ordinary skill in the art, having the teachings of Gunn, Comerford, Do, Duarte, and Cirne before him at the time the invention was made to modify grouped icon display with specific focus of Gunn, Comerford, Do, and Duarte to include the memorization of a groups focus as did Cirne. One would have been motivated to make such a combination because this allows for directing a focus to the same item when a group window is reopened.

32. With regard to claims 10, 20, and 29, Gunn teaches, in paragraph 120, a button change section used for establishing focus. Gunn further teaches, in paragraphs 125 and 128 and in figure 11, one of the plurality of keys in the key group has focus, where the example places "0" in the focus. Gunn teaches, in paragraphs 125 and 128, a system comprising a plurality of button groups, where when a button group is selected for display on the monitor, one of the buttons is displayed in a focused state, but doesn't specifically teach the use of the system for a telephone communication.

Do teaches, a system for providing a plurality of different button groups on a display (see column 7, line 10, through column 8, line 30), similar to that of Gunn but further teaches, in paragraph 7, lines 36-60, utilizing a numeric pad similar to that in Gunn to implement a telephone communication. Do teaches the system accepting a

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numeric keys for a telephone call known in the art to comprise ten keys [(XXX) XXX-XXXX] and further remembering the last entered 10 keys for a redial function. Do further teaches, in column 7, lines 49-54, the system further comprising a dial button for initiating a call and obviously creating a new last dialed number for later redial. It would have been obvious to one of ordinary skill in the art, having the teachings of Gunn, Comerford, and Duarte before him at the time the invention was made to modify grouped buttons of Gunn to be associated with particular applications such as a telephone application, as did Do. One would have been motivated to make such a combination because different applications have different relevant keys, in this case the numeric pad, as taught by both reference is utilized in Do to conduct a phone conversation, with past dialed numbers being preserved for further use. However, neither Gunn, Comerford, Do, and Duarte teach memorizing the button displayed in focus for later use.

Cirne teaches a system where user interface items are grouped and presented to a user as a group, where one of the items of the group is given particular focus (see column 4, lines 65 through column 5, line 20), similar to that of Gunn, but further teaches saving a current focus item in a group window, so that when the dialog returns to the window the focus can be directed to the same item (see column 13, lines 1-10). It would have been obvious to one of ordinary skill in the art, having the teachings of Gunn, Comerford, Do, Duarte, and Cirne before him at the time the invention was made to modify grouped icon display with specific focus of Gunn, Comerford, Duarte, and Do to include the memorization of a groups focus as did Cirne. One would have been

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motivated to make such a combination because this allows for directing a focus to the same item when a group window is reopened.

Response to Arguments

The arguments filed on 3-4-2009 have been fully considered but they are not persuasive. Reasons set forth below.

The Applicants argue that each of the references are concerned with completely different problems in different environments.

In response, the Examiner respectfully submits that each of Gunn, Comerford, and Do are related to the similar job of providing a specific keypad representation based upon the task at hand. Each reference is directed toward aiding a user in the entry of characters by adapting the user interface to fit the task whether it is by highlighting the most likely selections in some manner or only providing the keys most relevant the users input is aided by the applications adapting to the given situation.

The Applicants argue that none of the references teach "when a button to be focused is changed by an inter-group button changing operation unit from a button of one button group to a button of another button group, the display control section displays a predetermined button of the button group changed in the focused state" .

In response, the Examiner respectfully submits that Gunn teaches, in paragraphs 125 and 128 and in figures 10-12, changing button groups and further changing the focus to the most likely button in the changed to button group, where the most

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commonly used character (as predefined by previous usage) will be displayed in or near the center of a character set grouping that is user selectable, this focus item could additionally be displayed in a different color, font, or boldness to signify its focus (see paragraph 160).

The Applicants argue that the Crine reference would not be combined with the others as they are concerned with completely different problems in different environments.

In response, the Examiner respectfully submits that each of Gunn, Comerford, Duarte, and Do are related to the similar job of providing a specific keypad representation based upon the task at hand utilizing grouping to aid in selection. Cirne teaches a system where user interface items are grouped and presented to a user as a group, where one of the items of the group is given particular focus (see column 4, lines 65 through column 5, line 20), similar to that of Gunn, Comerford, Duarte, and Do, but further teaches saving a current focus item in a group window, so that when the dialog returns to the window the focus can be directed to the same item (see column 13, lines 1-10). It would have been obvious to one of ordinary skill in the art, having the teachings of Gunn, Comerford, Do, Duarte, and Cirne before him at the time the invention was made to modify grouped icon display with specific focus of Gunn, Comerford, Duarte, and Do to include the memorization of a groups focus as did Cirne. One would have been motivated to make such a combination because this allows for

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directing a focus to the same item when a group window is reopened (or traversed back to as in Duarte).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DENNIS G. BONSHOCK whose telephone number is (571)272-4047. The examiner can normally be reached on Monday - Friday, 6:30 a.m. - 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dennis Chow can be reached on (571) 272-7767. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dennis G. Bonshock/
Primary Examiner, Art Unit 2173
3-27-09
dgb